CLAIMS

1. Use of a blocking agent of the electrical activity of the damaged nerve endings of the neuroma for the preparation of a medicinal product for the treatment of dryness of the surface of the human eye caused by photorefractive surgery.

2. Use according to claim 1, in which the photorefractive surgery is an excimer laser photorefractive keratectomy or a laser-assisted in situ keratomileusis.

3. Use according to any one of the preceding claims, characterized in that the blocking agent is selected from those that exert their action on the voltage-dependent sodium, calcium, chlorine and potassium channels.

4. Use according to any one of the preceding claims, characterized in that the blocking agent is selected from the group comprising antiepileptics, anticonvulsants, anti-arrhythmic drugs, tricyclic antidepressants and local anaesthetics, and combinations thereof.

5. Use according to claim 4, characterized in that the blocking agent is selected from the group comprising lidocaine, tocainide, n-benzyl analogues of compounds such as tocainide, mexiletine, lamotrigine, carbamazepine, phenytoin, amitriptyline, N-phenylethyl amitriptyline, desipramine, gabapentin, nifekalant, venlafaxine, nefazodone, pregabalin, and the pharmaceutically acceptable salts thereof.

6. Use according to claim 5, characterized in that the blocking agent is carbamazepine.

7. Use according to claim 5, characterized in that the blocking agent is phenytoin.

8. Use according to claim 5, characterized in that the blocking agent is mexiletine.

9. Use according to claim 5, characterized in that the blocking agent is lidocaine.

10. Use according to claim 5, characterized in that the blocking agent is tocaidine.

11. Use according to claim 5, characterized in that the blocking agent is pregabalin.

12. Pharmaceutical composition for ophthalmic application that comprises a therapeutically effective amount of a blocking agent as described in any one of the preceding claims, together with suitable amounts of pharmaceutically acceptable excipients for constituting an ophthalmic formulation.

13. Composition according to claim 12, characterized in that the blocking agent is in an amount between 0.0005 and 1% (w/v).

14. Composition according to claim 13, characterized in that the blocking agent is in an amount between 0.0005 and 0.1% (w/v).

15. Method of treatment of a mammal, including a human, suffering from dryness of the ocular surface caused by photorefractive surgery, which comprises the ophthalmic administration of an agent for blocking the electrical activity of the damaged nerve endings of the neuroma, together with suitable amounts of pharmaceutically acceptable excipients for constituting a topical formulation.

16. Method according to claim 15, characterized in that the photorefractive surgery is an excimer laser photorefractive keratectomy or a laser-assisted in situ keratomileusis.

17. Method according to any one of the claims 15-16, characterized in that the blocking agent is selected from those that exert their action on the voltage-dependent sodium, calcium, chlorine and potassium channels.

18. Method according to any one of the claims 15-17, characterized in that the blocking agent is selected from the group comprising antiepileptics, anticonvulsants, anti-arrhythmic drugs, tricyclic antidepressants and local anaesthetics, and combinations thereof.

19. Method according to claim 18, characterized in that the blocking agent is selected from the group comprising lidocaine, tocainide, n-benzyl analogues of compounds such as tocainide, mexiletine, lamotrigine, carbamazepine, phenytoin, amitriptyline, N-phenylethyl amitriptyline, desipramine, gabapentin, nifekalant, venlafaxine, nefazodone, pregabalin, and the pharmaceutically acceptable salts thereof.

20. Method according to claim 19, characterized in that the blocking agent is carbamazepine.

21. Method according to claim 19, characterized in that the blocking agent is phenytoin.

22. Method according to claim 19, characterized in that the blocking agent is mexiletine.

23. Method according to claim 19, characterized in that the blocking agent is lidocaine.

24. Method according to claim 19, characterized in that the blocking agent is tocaidine.

25. Method according to claim 19, characterized in that the blocking agent is pregabalin.